



ENVIRONMENTAL PROTECTION AGENCY  
Office of Pesticide Programs  
Registration Division (H7505C)  
401 "M" St., S.W.  
Washington, D.C. 20460

EPA Reg. Number:

1677-209

Date of Issuance:

SEP 29 2005

NOTICE OF PESTICIDE:

Registration  
 Reregistration

(under FIFRA, as amended)

Term of Issuance: Conditional

Name of Pesticide Product:

KX-6178

Name and Address of Registrant (include ZIP Code):

Ecolab, Inc.  
370 N. Wabasha Street  
St. Paul, MI 55102

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered/reregistered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA sec. 3(c)(7)(A) provided that you:

1. Submit and/or cite all data required for registration/ reregistration of your product under FIFRA sec. 3(c)(5) when the Agency requires all registrants of similar products to submit such data; and submit acceptable responses required for reregistration of your product under FIFRA section 4.

2. Make the following label changes:

a. Revise the EPA Registration Number to read, "EPA Reg. No. "1677-209".

Signature of Approving Official:

Marshall Swindell, PM 33  
Regulatory Management Branch 1  
Antimicrobial Division (7510C)

Date:

SEP 29 2005

b. Under the "Physical and Chemical Hazards" include the statement "This product is not to be used around electrical equipment.

c. Under the heading "Foam Sanitizing Food Contact Surfaces", the claims for the following microorganisms must be removed from the proposed label:

- |                        |                          |
|------------------------|--------------------------|
| Campylobacter jejuni   | Candida albicans         |
| Enterobacter sakasaki  | Escherichia coli O157:H7 |
| Listeria monocytogenes | Pseudomonas aeruginosa   |
| Salmonella typhimurium |                          |

d. Under the heading "Foam Sanitizing Non-Food Contact Surfaces" (with or without Liquid K), the claims for the following microorganisms must be removed from the proposed label:

- |                        |                        |
|------------------------|------------------------|
| Enterobacter sakasaki  | Listeria monocytogenes |
| Pseudomonas aeruginosa | Salmonella typhimurium |

e. In the Precautionary Statements section, replace ".....protective clothing and rubber gloves" with "....coveralls worn over long-sleeved shirt and long pants socks chemical-resistant glove, and chemical-resistant footwear".

3. The Product Chemistry Data was found to be acceptable. However, a Corrosion Characteristics study along with the one-year storage stability study must be conducted.

4. Remove Sodium 1-octane sulfonate, on page 3 of 3 of the CSF from the CSFs.

5. It is recommended that a Explodability study be submitted since a statement under the "Storage and Disposal" heading indicates ".....avoid any explosion hazard."

See the attached copies of the Product Chemistry Review, the Efficacy Review and the Acute Toxicity Review under "RECOMMENDATIONS" and "CONCLUSION" for additional comments.

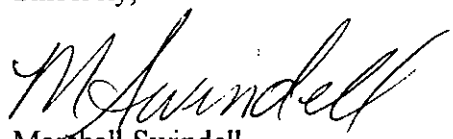
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EPA Registration No. 1677-209

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA sec. 6(e). Your release for shipment of the product constitutes acceptance of these conditions.

Submit two (2) copies of the final printed labeling before you release the product labeling for shipment. A stamped copy of the "accepted" labeling is enclosed for your records.

If you have any questions concerning this letter, please contact Martha Terry at (703) 308-6217.

Sincerely,



Marshall Swindell  
Product Manager 33  
Regulatory Management Branch 1  
Antimicrobial Division (7510C)

Enclosure

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# KX-6178

## SANITIZER AND DISINFECTANT

### Active Ingredients:

Hydrogen Peroxide.....	7.52%
Peroxyoctanoic Acid.....	1.00%
Octanoic Acid.....	2.50%

Other Ingredients:.....	88.98%
Total:.....	100.00%

**ACCEPTED**  
**with COMMENTS**  
**EPA Letter Dated:**

**SEP 29 2005**

**KEEP OUT OF REACH OF CHILDREN**  
**DANGER**

**Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 1677-289**

### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**DANGER: CORROSIVE.** Causes irreversible eye damage and skin burns. Harmful if swallowed or inhaled. Avoid breathing spray mist. Do not get in eyes, on skin or on clothing. Wear protective eyewear (goggles, face shield or safety glasses), protective clothing and rubber gloves. Wash thoroughly after handling with soap and water and before eating, drinking, chewing gum or using tobacco. Remove contaminated clothing and wash clothing before reuse. Prolonged or frequently repeated skin contact may cause an allergic reaction in some individuals.

#### FIRST AID

**IF IN EYES:** Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**IF SWALLOWED:** Call a poison control center or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

**IF ON SKIN OR CLOTHING:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**IF INHALED:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Have the product container or label with you when calling a poison control center or going for treatment.

**FOR EMERGENCY MEDICAL INFORMATION CALL TOLL FREE: 1-800-328-0026**

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

**PHYSICAL AND CHEMICAL HAZARDS:** Strong oxidizing agent. Corrosive. Do not use in concentrated form. Mix only with water according to label instructions. Never bring concentrate in contact with other sanitizers, cleaners or organic substances.

**ENVIRONMENTAL HAZARDS (containers 5 gallons or greater):** This pesticide is toxic to birds, fish, and aquatic invertebrates. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.

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**DIRECTIONS FOR USE**

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Under the Federal Insecticide, Fungicide, and Rodenticide Act as amended, for the pesticide, registered under EPA Reg. No. 1677-209

**SANITIZATION**

KX-6178 acid sanitizer is recommended for use on pre-cleaned surfaces such as equipment, pipelines, tanks, vats, fillers, evaporators, pasteurizers and aseptic equipment in dairies, dairy farms, breweries, wineries, beverage and food processing plants. This product is effective as a sanitizer when solution is prepared in water of up to 500 ppm hardness as CaCO<sub>3</sub>.

NOTE: FOR MECHANICAL OPERATIONS, prepared used solution may not be reused for sanitizing but may be reused for other purposes such as cleaning.

FOR MANUAL OPERATIONS, fresh sanitizing solution should be prepared at least daily or more often if the solution becomes diluted or soiled.

**SANITIZING FOOD CONTACT SURFACES**

Prior to sanitizing, remove gross food particles, and then wash with a detergent solution, followed by a potable water rinse. Sanitize with a concentration of 1.0 ounce KX-6178 concentrate per 6 to 8 gallons of water (0.1% - 0.13% v/v concentration). At this dilution KX-6178 is an effective food contact surface sanitizer against the following organisms: *Staphylococcus aureus*, *Escherichia coli*, *Escherichia coli* O157:H7, *Pseudomonas aeruginosa*, *Listeria monocytogenes*, *Salmonella typhimurium*, *Enterobacter sakazakii*, *Campylobacter jejuni* and *Candida albicans*. At the same dilution, KX-6178 is also effective for sanitization against the beverage spoilage organisms *Pediococcus damnosus* and *Lactobacillus malefermentans*. Use immersion, coarse spray or circulation techniques as appropriate to the equipment. All surfaces should be exposed to the sanitizing solution for a period of not less than one minute unless a longer time is specified by the governing sanitary code. Drain thoroughly and allow to air dry. Do not rinse.

**FOAM SANITIZING FOOD CONTACT SURFACES**

KX-6178 is an effective foam sanitizer of pre-cleaned food contact surfaces. Foam sanitize with a concentration of 1.0 ounce KX-6178 concentrate per 6 to 8 gallons of water (0.1% - 0.13% v/v concentration). At this dilution KX-6178 is an effective foaming food contact surface sanitizer against the following organisms: *Staphylococcus aureus*, *Escherichia coli*, *Escherichia coli* O157:H7, *Pseudomonas aeruginosa*, *Listeria monocytogenes*, *Salmonella typhimurium*, *Enterobacter sakazakii*, *Campylobacter jejuni* and *Candida albicans*. At the same dilution, KX-6178 is also effective for foam sanitization against the beverage spoilage organisms *Pediococcus damnosus* and *Lactobacillus malefermentans*. Use an appropriate device to generate foam intended to cover the food contact surfaces. All surfaces should be exposed to the sanitizing solution for a period of not less than one minute unless a longer time is specified by the governing sanitary code. Drain thoroughly and allow to air dry. Do not rinse.

**SANITIZING NON-FOOD CONTACT SURFACES**

Pre-clean surfaces as directed above. Sanitize non-food contact surfaces such as floors, walls, tables, chairs, benches, drains, troughs, and drip pans with 1.0 ounce KX-6178 concentrate per 6 to 8 gallons of water (0.1% - 0.13% v/v concentration). At this concentration the product is effective as a non-food contact surface sanitizer against the following organisms: *Staphylococcus aureus*, *Enterobacter aerogenes*, *Listeria monocytogenes*, *Salmonella typhimurium*, *Pseudomonas aeruginosa*, *Enterobacter sakazakii*. All surfaces should be exposed to the sanitizing solution for a period of not less than 5 minutes. Drain thoroughly and allow to air dry. No rinse necessary.

**FOAM SANITIZING NON-FOOD CONTACT SURFACES**

KX-6178 is an effective foam sanitizer of pre-cleaned non-food contact surfaces, such as boots, floors, walls, drains, and associated equipment. Sanitize with a concentration of 1.0 ounce KX-6178 concentrate per 6 to 8 gallons of water (0.1% - 0.13% v/v concentration). At this concentration the product is effective as a non-food contact surface sanitizer against the following organisms: *Staphylococcus aureus*, *Enterobacter aerogenes*, *Listeria monocytogenes*, *Salmonella typhimurium*, *Pseudomonas aeruginosa*, *Enterobacter sakazakii*. Apply solution as a foam using recommended equipment such as a Super Foamer. Wet surfaces thoroughly. Surfaces should be exposed to the sanitizing foam for a period of not less than 5 minutes. No rinse is necessary. Contact your Ecolab representative for information on a recommended foamer.

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FOAM SANITIZING NON-FOOD CONTACT SURFACES

**KX-6178** is an effective foam sanitizer of precleaned non-food contact surfaces, such as boots, floors, walls, drains, and associated equipment. To foam sanitize, prepare a solution of 1.0 ounce **KX-6178** concentrate per 8 gallons of water (0.1% v/v concentration) and 1.4 ounces per 8 gallons (0.13% v/v concentration) **Liquid K (or EcoCare 600 FA)**. For example, in eight gallons of water, add 1.0 ounce of **KX-6178** and 1.4 ounces of **Liquid K (or EcoCare 600 FA)**. **Liquid K (or EcoCare 600 FA)** is the only approved foam generator. At this concentration the product is effective as a non-food contact surface sanitizer against the following organisms: *Staphylococcus aureus*, *Enterobacter aerogenes*, *Listeria monocytogenes*, *Salmonella typhimurium*, *Pseudomonas aeruginosa*, *Enterobacter sakazakii*. Apply solution as a foam using recommended equipment such as a Super Foamer. Wet surfaces thoroughly. Surfaces should be exposed to the sanitizing foam for a period of not less than 5 minutes. No rinse is necessary. Contact your Ecolab representative for information on a recommended foamer.

DISINFECTION

**KX-6178** disinfects as it cleans in one operation. **KX-6178** can be used to disinfect floors, walls and other hard nonporous surfaces such as tables, chairs, countertops, bathroom fixtures, sinks, shelves, racks, carts, exterior surfaces of refrigerators and coolers, tile, linoleum, vinyl, glazed porcelain, plastic (such as polypropylene and polyethylene), stainless steel, or glass. Areas of use include dairies, dairy farms, breweries, wineries, beverage and food processing plants, poultry farms, veterinary facilities, animal care facilities and industrial facilities.

Before use in federally inspected meat and poultry food processing plants and dairies, food products and packaging material must be removed from the room or carefully protected.

COMBINATION DISINFECTION AND CLEANING

**KX-6178** is effective as a disinfectant at a concentration of 1.0 – 2.0 ounces **KX-6178** concentrate per 2.0 gallons (0.39% - 0.78% v/v concentration) of hard water (500 ppm as CaCO<sub>3</sub>), in the presence of 5% blood serum. At this dilution, **KX-6178** is effective against *Staphylococcus aureus*, *Salmonella choleraesuis*, *Pseudomonas aeruginosa* and *Candida albicans*. For heavily soiled areas a precleaning step is required. Prepare a disinfecting and cleaning solution by diluting 1.0 – 2.0 ounces **KX-6178** concentrate per 2 gallons of water (0.39% - 0.78% v/v concentration). Apply use solution with mop, cloth, sponge, brush, scrubber, or coarse spray device or by soaking so as to wet all surfaces thoroughly. Allow to remain wet for 10 minutes, and then remove solution and entrapped soil with a clean wet mop, cloth, or wet vacuum pickup. Prepare a fresh solution daily or when it becomes soiled or diluted.

VIRUCIDAL

**KX-6178** is an effective virucide at a concentration of 1.0-2.0 ounces per 2 gallons (0.39%-0.78% v/v concentration) of hard water (500 ppm as CaCO<sub>3</sub>), in the presence of 5% blood serum. At this dilution, **KX-6178** is effective against Influenza A (H1N1), Influenza A (H3N2), Influenza B and Reovirus when used at 20°C with a 10 minute contact time. Apply as directed under Disinfection.

DISINFECTION OF POULTRY PREMISES, TRUCKS, COOPS AND CRATES

1. Remove all poultry and feeds from premises, trucks, coops and crates.
2. Remove all litter and droppings from floors, walls and surfaces of facilities occupied or traversed by poultry.
3. Empty all troughs, racks and other feeding and watering appliances.
4. Thoroughly clean all surfaces with a detergent and rinse with water.
5. Saturate surfaces with a 1.0-2.0 ounces per 2 gallons (0.39%-0.78% v/v concentration) solution of **KX-6178** for a period of 10 minutes.
6. Ventilate buildings, coops and other closed spaces. Do not house poultry or employ equipment until treatment has been absorbed, set or dried.
7. Thoroughly scrub treated feed racks, troughs, automatic feeders, fountains and waterers with a detergent and rinse with potable water before reuse.

See your Ecolab Representative for specific recommendations for all cleaning and rinsing requirements.

ACCEPTED  
with COMMENTS  
EPA Letter Dated:

SEP 29 2005

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act  
amended, for the pesticide,  
registered under EPA Reg. No.

7/7

POULTRY HATCHERY DISINFECTION

Clean out any remaining eggs and chicks. Remove gross soils, such as litter, down, shell fragments or other hatching related debris. Empty all racks and other equipment. Thoroughly wash all surfaces, including floors, walls, conveyors, trays and water systems with a recommended detergent. Rinse thoroughly with water. Apply a 1.0-2.0 ounces per 2 gallons (0.39%-0.78% v/v concentration) solution of KX-6178 with a mop, cloth, brush or coarse spray. Wet all surfaces and allow to remain wet for 10 minutes. Ventilate buildings and other closed spaces. Allow to dry before reintroducing eggs.

DISINFECTION AND DEODORIZING OF ANIMAL HOUSING FACILITIES (BARN, KENNELS, HUTCHES)

Remove animals and feed from facilities. Remove litter, waste matter and gross soils from floors, walls and surfaces of facilities occupied or traversed by animals. Empty all troughs, rack and other feeding and watering equipment. Wash surfaces with a recommended alkaline detergent, by manual, foam, or spray application. Rinse with water. Apply a 1.0-2.0 ounces per 2 gallons (0.39%-0.78% v/v concentration) solution of KX-6178 with a mop, cloth, brush or coarse spray. Wet all surfaces and allow to remain wet for 10 minutes. Ventilate buildings and other closed spaces. Allow to air dry before reintroducing animals.

**STORAGE & DISPOSAL**

**DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE OR DISPOSAL**

**PESTICIDE STORAGE:** Product should be kept cool and in a vented container to avoid any explosion hazard.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:**

(1 gallon) Do not reuse empty containers. Wrap container and put in trash. → 84-1

(4, 15, 30, 50 gallons plastic) Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(2.5 gal bladder in box) Remove empty bladder from outer corrugated box. Triple rinse bladder (or equivalent). Offer box and bladder for recycling or dispose of in a sanitary landfill or incineration, or if allowed by state and local authorities, by burning. If burned, stay out of smoke.

(Totes) Verify that the tote is empty. Do not rinse or clean. Seal tote and contact Ecolab for return.

7/14/05  
JFM  
(don't waste  
with site  
83063/6  
...)

**FOR COMMERCIAL USE ONLY  
STRONG OXIDIZING AGENT**

EPA Reg. No. 1677-XXX  
EPA Est. 1677-MN-1 (P), 60156-IL-1 (SI), 1677-CA-2(R),  
1677-TX-1(D), 1677-OH-1(H), 1677-IL-1(J), 1677-GA-1(M),  
1677-PR-1(B), 1677-CA-1(S), 1677-WV-1(V)  
Superscript refers to first letter of date code

Net Contents:	1 U.S. Gal. (3.78 L)
	5 U.S. Gals. (18.9 L)
	15 U.S. Gals. (56.8 L)
	50 U.S. Gals. (189 L)
	300 U.S. Gals. (tote)

Ecolab Inc.,  
370 N. Wabasha Street  
St. Paul, MN 55102

**ACCEPTED  
with COMMENTS  
EPA Letter Dated**

**SEP 29 2005**

Under the Federal Insecticide,  
Fungicide, and Rodenticide Act as  
amended, for the pesticide,  
registered under EPA Reg. No.

S3-2

} S3-3

} S3-7